

### Amendments to the Claims

1. (Currently amended) A method of volume visualization comprising:  
    providing of volumetric data, the volumetric data including a plurality of voxels defining a body structure and having first voxels belonging to a reference surface, the reference surface being a surface of a the body structure;  
    entering a user selected distance by means of user interface means comprising a wheel mouse, an amount of rotation of the wheel of the wheel mouse being indicative of the user selected distance, the user selected distance measured from the surface of the body structure;  
    determining of second voxels from the plurality of voxels of the volumetric data, wherein the second voxels are spaced the user selected distance from the reference surface, the second voxels belonging to the body structure; and  
    visualizing of the second voxels in a 2-dimensional image, wherein the 2-dimensional image is located at the user selected distance from the surface of the body structure.
2. (Original) The method of claim 1 further comprising performing a segmentation of the volumetric data to identify the first voxels.
3. (Previously amended) The method of claim 1, wherein the distance of each one of the second voxels from the reference surface being determined along a direction of projection.
4. (Original) The method of claim 1, wherein the distance of each one of the second voxels from the reference surface being determined by a minimum distance measure.
5. (Original) The method of claim 4, wherein the distance measure being an Euclidean distance.
6. (Previously presented) The method of claim 1, whereby the volumetric data is medical image data.

7. (Original) The method of claim 1, wherein the volumetric data being three dimensional microscopy data.

8. (Currently amended) A computer program product comprising a computer readable medium encoded with computer executable instructions for volume visualization, comprising program means for the computer executable instructions performing the steps of following:

providing of volumetric data, the volumetric data having first voxels belonging to a reference surface, the reference surface being a surface of a body structure;

entering a user selected distance by means of user interface means comprising a wheel mouse, an amount of rotation of the wheel of the wheel mouse being indicative of the user selected distance, the user selected distance measured from the surface of the body structure;

determining of second voxels of the volumetric data, wherein the second voxels are spaced the user selected distance from the reference surface, the second voxels belonging to the body structure; and

visualizing of the second voxels in a 2-dimensional image, wherein the 2-dimensional image is located at the user selected distance from the surface of the body structure.

9. (Original) The computer program product of claim 8, the program means being adapted to perform a segmentation of the volumetric data to identify the first voxels.

10. (Currently amended) A computer system for volume visualization, comprising:

means for storing of volumetric data, the volumetric data having first voxels belonging to a reference surface, the reference surface being a surface of a body structure;

user interface means for entering of a user selected distance, the user interface means comprising a wheel mouse, the amount of rotation of the wheel of the wheel mouse being indicative of the user selected distance, the user selected distance measured from the surface of the body structure;

means for determining of second voxels of the volumetric data, wherein the second voxels are spaced the user selected distance from the reference surface, the second voxels

belonging to the body structure; and

means for visualizing of the second voxels in a 2-dimensional image, wherein the 2-dimensional image is located at the user selected distance from the surface of the body structure.

11. (Original) The computer system of claim 10, further comprising means for segmentation of the volumetric data to identify the first voxels.

12. (Original) The computer system of claim 10, further comprising means for volume rendering of the second voxels.

13. (Previously presented) The method of claim 1, wherein the body structure is an organ or other pathological structure.

14. (Previously presented) The method of claim 8, wherein the volumetric data is medical image data.

15. (Previously presented) The method of claim 8, wherein the body structure is an organ or other pathological structure.

16. (Previously presented) The method of claim 10, wherein the volumetric data is medical image data.

17. (Previously presented) The method of claim 10, wherein the body structure is an organ or other pathological structure.

18. (New) The method of claim 1 further comprising reformatting the volumetric data by moving the first voxels to a common row of a single slice and moving the plurality of voxels of the volumetric data such that a distance from each of the plurality of voxels to the reference surface remains the same.